November 16, 1994

FACT SHEET

Final Air Emission Standards under the Resource Conservation and Recovery Act (RCRA) for Hazardous Waste Treatment, Storage, and Disposal Facilities: Tanks, Surface Impoundments and Containers

TODAY'S ACTION....

- The Environmental Protection Agency (EPA) is issuing a final rule under the authority of section 3004(n) of the Resource Conservation and Recovery Act (RCRA) to reduce organic air emissions from hazardous waste treatment, storage, and disposal facilities (TSDF).
- ♦ Hazardous waste TSDF store waste in units such as tanks and containers, treat waste by processes such as recycling, and dispose of waste by techniques such as deep-well injection or incineration.

WHAT ARE THE HEALTH AND ENVIRONMENTAL BENEFITS?

- The final rule will reduce emissions of cancer-causing air toxics (such as benzene and carbon tetrachloride) and volatile organics, which include volatile organic compounds (VOC) and hazardous air pollutants by an estimated 1 million tons annually.
- Hazardous waste TSDF are one of the largest industrial sources of VOC in the country. The VOC emissions contribute significantly to ground-level ozone or smog. Ground-level ozone has been shown to cause adverse effects on human health and can damage forests and crops.
- The EPA estimates that the incidence of cancer resulting from exposure to TSDF organic air emissions will decrease from 48 cases per year to 2 cases per year.

BACKGROUND

- Promulgation of this standard marks the completion of the second phase of a three-phased regulatory program under section 3004(n) of RCRA to control air emissions from hazardous waste TSDF. Phase I was completed when the EPA issued final standards for TSDF process vents and equipment leaks in June 1990.
- Phase III will address any remaining risks posed by hazardous waste TSDF to assess the need for additional regulations.

WHO IS AFFECTED BY THE FINAL RULE?

Owners and operators of TSDF that are subject to the permitting requirements for hazardous waste management units under Subtitle C of RCRA may be subject to this regulation. Subtitle C defines the hazardous waste universe regulated under RCRA. The facilities covered by this rule include:

- Approximately 2,300 TSDF, most of which are located at production facilities such as chemical plants, petroleum refineries, and pharmaceutical manufacturers across the nation.
- An additional 20,000 generators have 90-day tanks and containers that are now subject to the regulation. (Under the conditions specified in 40 CFR 262.34, these units are exempt from the Subtitle C permitting requirements provided the waste is accumulated in the unit for no more than 90 days and complies with the control requirements specified in 40 CFR 265 Subpart I or J).
- These requirements will be applicable to all affected facilities on the effective date of the standards, regardless of a facility's permit status. The rules are intended to be self-implementing, and do not require a modification to be made to existing RCRA final permits.

WHAT DO THE FINAL STANDARDS REQUIRE?

<u>Introduction</u>

- A "surface impoundment" is an excavation or natural depression in the ground, such as a pond or lagoon, that holds an accumulation of waste. A "tank" is a stationary device designed to contain waste, such as a storage tank or a treatment tank. A "container," such as a 55-gallon drum or a dumpster, is a portable device in which waste is accumulated or stored.
- This rule is not applicable to other hazardous waste management units that may be present at a TSDF, such as landfills or waste piles. Where appropriate, the standards do apply to miscellaneous units that are like tanks or containers.

Required Controls

Organic emission control equipment must be installed, operated, and maintained on all tanks, surface impoundments, and containers that manage hazardous waste with an average volatile organic content equal to 100 parts per million by weight (ppmw) or more.

- ◆ Tanks and surface impoundments must use covers (e.g., a roof on a tank, an enclosure over a surface impoundment) and vent the collected organic vapors to a control device that reduces the organics in the vapor stream by 95 percent. Use of a cover without additional controls is allowed for a tank that meets certain capacity and waste vapor pressure conditions and for all surface impoundments provided: (1) no waste-fixating, heating, or heat-generating process is conducted in the unit; and (2) the waste managed in the unit is not mixed, stirred, agitated, or circulated within the unit using a process that results in splashing, frothing, or visible turbulent flow on the waste surface.
- Containers used for handling, preparing, or storing hazardous waste are required to be covered except during necessary operations that require the cover to be removed (such as waste transfer, inspecting, or sampling). For containers with a design capacity greater than or equal to 0.46 m³ (approximately 119 gallons), waste loading operations performed by pumping shall use submerged fill. Containers used for waste fixation are required to be located under a cover with a closed vent system that routes all organic vapors vented from the container to a control device.

WHAT ARE THE MAJOR CHANGES IN THE REGULATION SINCE PROPOSAL?

- A TSDF tank, surface impoundment, or container is exempted from the required air emission controls provided that the waste managed in the unit has an average volatile organic concentration less than 100 ppmw. This concentration cutoff for the proposed rule was 500 ppmw, but it was a never-to-be-exceeded value.
- ♦ A container having a design capacity less than 0.1 m⁵ (approximately 26 gallons) is exempted from all container control requirements.
- A container required to use emission controls under the final standards and having a design capacity less than 0.46 m (approximately 119 gallons) is exempted from certain container loading and monitoring requirements.
- Alternative control requirements for containers have been added to the final standards allowing TSDF owners and operators to use certain containers that meet the existing U.S. Department of Transportation specifications and testing requirements for containers used to transport hazardous waste.

The final standards include a deferral for radioactive mixed waste and waste associated with cleanup activities. Therefore, these waste types are not required to be managed in units that are equipped with the specified controls.

HOW MUCH WILL THE FINAL RULE COST?

Total capital investment cost to TSDF owners and operators to implement the final standards is estimated to be approximately \$290 million. Total annualized costs are estimated to be \$110 million per year. The major portion of these costs is associated with the design, installation, and operation of emission control equipment.

FOR MORE INFORMATION...

For specific questions about the rule, contact Michele Aston at (919) 541-2363. To order a copy of the Federal Register notice or the fact sheet, please call the RCRA Hotline Monday through Friday, 8:30 a.m. to 7:30 p.m., EST and ask for the rule Final Air Emission Standards under the Resource Conservation and Recovery Act (RCRA) for Hazardous Waste Treatment, Storage, and Disposal Facilities; Tanks, Surface Impoundments and Containers. The RCRA Hotline's national toll-free number is (800) 424-9346; for the hearing impaired, it is (TDD) (800) 553-7672. You may also write to the RCRA Information Center (5305), US EPA, 401 M Street, SW, Washington, DC 20460.

The Federal Register notice and the BID are also available on the EPA's Clean-Up Information Bulletin Board (CLU-IN). access CLU-IN with a modem of up to 28,800 baud, dial (301) 589-8366. First time users will be asked to input some initial registration information. Next, select "D" (download) from the Input the file name "RCRAAIR1.ZIP" to download this main menu. Input the file name "RCRAAIR2.ZIP" to download the BID. Follow the on-line instructions to complete the download. information about the download procedure is located in Bulletin 104; to read this, type "B 104" from the main menu. In the interim before the Federal Register notice is available, the final signature version of the promulgation notice will be available under the file name "RCRAAIRD.ZIP" from the CLU-IN For additional help with these instructions, bulletin board. telephone the CLU-IN help line at (301) 589-8368.